



**District Rural Development Agency,  
Ganjam, Chatrapur**

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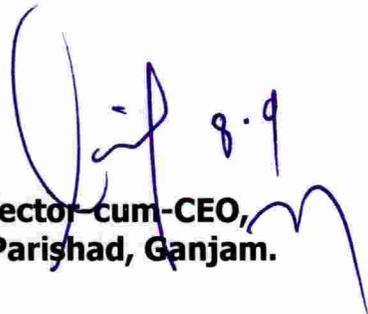
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**CORRIGENDUM**

The technical specification mentioned for 20w/24w, 30w, 60w, 80w in LED Based Solar Street Light System and other document vide page -10 to 12 and 15 in this office Advertisement No. 8030/ Dev dated 28.07.2021, may be replace with the revised technical specifications enclosed herewith. Further, who have submitted the tender papers can bring the documents with this specification separately at the time of tender opening.

*Enclose:- As above*

  
Collector-cum-CEO,  
Zilla Parishad, Ganjam.

### Technical Specification:20W / 24W Solar Street Light

ALL-IN-ONE/Semi-Intgrated Solar Street Light is made in India with High Efficiency Multi LED Luminaries with Fittings

SI.NO	Technical Specification:	20 Watt/24 Watt
1	Luminaire Wattage	20w /24w
2	Led Make	OSRAM/CREE/PHILIPS/NISIA
3	LED viewing angle	120°
4	Color Temperature	5700K-6500K
5	Luminous Efficiency	>170 Lumen/watt
6	Lumen Output	>3400 Lumen
7	Life Span	>50000hours
8	Driver	In Built DC-DC type
9	Body	Alluminum Extruded / PDC Body
10	Protection	IP66 Standards
11	Compliances Standard	LM79,LM80

### Energy Storage system and controller

SI.NO	Technical Specification:	20 Watt/24 Watt
1	Battery(LiFePO4) Rechargeble	12.8V/30AH/BIS standard/MNRE approved
2	Efficiency	>93%
3	Battery Pack Safety	in built with PCM model
4	Solar Charge Controller Capacity	12V,5 A
5	Low-Voltage indication	YES
6	Charging indication	YES
7	Charge Controller	IGBT Technology
8	Other Protections	A.Over-charge protection B.Deep-discharge protection C.Over Current protection D.Short Circuit protection E.Over voltage protection
9	Tempartature	-10°C. to +60°C.
10	Life cycle	>2000 cycles at 80% OF INITIAL CAPACITY
11	compliances standard	IEC62133::2012,BIS
12	Control	Maximum power point tracking (MPPT)based change controler with integrated LED driver
13	Dusk to down Operation	Provided
14	Motion Senser	PIR Senser
15	Motion Senser Range	>10M
16	Light Mounting Height	5M above ground
17	Humidity Range	0 to 95%(noncondensing)
18	Warranty	5 years

19	<b>Mounting Structure &amp; Accessories</b>	<p><b>Pole:-</b> 5/6 meter galvanized iron ingound or padestal mount pole as required for the system. 7/9 meter octagonal pole for Mini-Mast system.</p> <p><b>Battery Box:-</b> Battery Box made of MS CRCA sheet duly powder coated.</p> <p><b>PV Frame:-</b> PV Panel frame made of MS angel duly powder coated/painted.</p> <p><b>Nuts/Bolts &amp; Accessories:-</b> Zinc plated nuts &amp; bolts along with foundation bolts as requird, luminaire mounting arms, battery box stand and other accessories as required.</p> <p><b>Wires:-</b> Suitable wires for internal connection of battery panel luminaire.</p>
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**SOLAR PANEL**

Page No	Technical Specification:	20 Watt/24 Watt
1	<b>Solar Cell</b>	Premium grade Mono Crystalline Sillicon Type / Multi Crystalline PV Panel/ MNRE approved
2	<b>Solar Module Power</b>	>60W
3	<b>Compliances Standard</b>	IEC61215,ICE 61701,IEC61730
4	<b>Life Cycle</b>	>20years
5	<b>Battery Back up</b>	24 hours.

### Technical Specification: 30W Solar Street Light

Supply, fitting, fixing of 30 watt LED Solar All-In-One /Semi Integrated Street Lighting system. The Luminaire have MPPT charge controller and IP 66 Standards Protection. The solar lighting system should be having 100 Wp PV module, 12.8V/30Ah LiFePO4 (Lithium Ferro Phosphate) battery pack, clear 5 mtr long M. S galvanized Tubular pole (Hot dip galvanized), Theft retardant Metallic battery box mounted on pole top. The solar lighting system manufacture must be registered in MNRE as a channel partner having SP 1 A gradation.

#### LED Luminaries with Fittings

SI.NO	Technical Specification:	30 Watt
1	Luminaire Wattage	30w
2	Led Make	OSRAM/CREE/PHILIPS/NISIA
3	LED viewing angle	120°
4	Color Temperature	3000K-6500K
5	Luminous Efficiency	>130 Lumen/watt
6	Lumen Output	>3900 Lumen
7	Life Span	>50000hours
8	Driver	In Built DC-DC type
9	Body	Alluminum Extruded / PDC Body
10	Protection	IP66 Standards
11	Compliances Standard	LM79,LM80

#### Energy Storage system and controller

SI.NO	Technical Specification:	30 Watt
1	Battery(LiFePO4) Rechargeble	12.8V/42AH
2	Efficiency	>90%
3	Battery Pack Safety	in built with PCM model
4	Solar Charge Controller Capacity	12V,10 A
5	Low-Voltage indication	YES
6	Charging indication	YES
7	Charge Controller	IGBT Technology
8	Other Protections	A.Over-charge protection B.Deep-discharge protection C.Over Current protection D.Short Circuit protection E.Over voltage protection
9	Tempartature	-40°C. to +60°C.
10	Life cycle	>2000 cycles at 80% OF INITIAL CAPACITY
11	compliances standard	IEC62133::2012,BIS
12	Control	Maximum power point tracking (MPPT)based change controller with integrated LED driver
13	Dusk to down Operation	Provided
14	Motion Sensor	PIR Sensor
15	Motion Sensor Range	>9M
16	Light Mounting Height	5M above ground
17	Humidity Range	0 to 95%(noncondensing)
18	Warranty	5 years

19	<p><b>Mounting Structure &amp; Accessories</b></p>	<p><b>Pole:-</b> 5/6 meter galvanized iron ingound or padestal mount pole as required for the system. 7/9 meter octagonal pole for Mini-Mast system.</p> <p><b>Battery Box:-</b> Battery Box made of MS CRCA sheet dully powder coated.</p> <p><b>PV Frame:-</b> PV Panel frame made of MS angel dully powder coated/painted.</p> <p><b>Nuts/Bolts &amp; Accessories:-</b> Zinc plated nuts &amp; bolts along with foundation bolts as requird, luminaire mounting arms, battery box stand and other accessories as required.</p> <p><b>Wires:-</b> Suitable wires for internal connection of battery panel luminaire.</p>
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#### SOLAR PANEL

SI.NO	Technical Specification:	30 Watt
1	<b>Solar Cell</b>	Premium grade Poly Crystalline Sillicon Type/ MNRE approved
2	<b>Solar Module Power</b>	>100W
3	<b>Compliances Standard</b>	IEC61215,ICE 61701,IEC61730
4	<b>Life Cycle</b>	>20years
5	<b>Battery Back up</b>	12 hours/24 hours.

### Technical Specification: 60W Solar Street Light

Supply, fitting, fixing of 60 watt LED Solar Standalone /Semi Integrated Street Lighting system. The Luminaire have MPPT charge controller and IP 66 Standards Protection. The solar lighting system should be having 200 Wp PV module, 12.8V/60Ah LiFePO4 (Lithium Ferro Phosphate) battery pack, 6 mtr long M. S galvanized Tubular pole (Hot dip galvanized), Theft retardant Metallic battery box mounted on pole top. The solar lighting system manufacture must be registered in MNRE as a channel partner having SP 1 A gradation.

#### LED Luminaries with Fittings

SI.NO	Technical Specification:	60 Watt
1	Luminaire Wattage	60w
2	Led Make	OSRAM/CREE/PHILIPS/NISIA
3	LED viewing angle	120°
4	Color Temperature	3000K-6500K
5	Luminous Efficiency	>130 Lumen/watt
6	Lumen Output	>9600 Lumen
7	Life Span	>50000hours
8	Driver	In Built DC-DC type
9	Body	Alluminum Extruded / PDC Body
10	Protection	IP66 Standards
11	Compliances Standard	LM79,LM80

#### Energy Storage system and controller

SI.NO	Technical Specification:	60 Watt
1	Battery(LiFePO4) Rechargeble	12.8V/64AH/BIS standard
2	Efficiency	>90%
3	Battery Pack Safety	in built with PCM model
4	Solar Charge Controller Capacity	12V, 10 A
5	Low-Voltage indication	YES
6	Charging indication	YES
7	Charge Controller	IGBT Technology
8	Other Protections	A.Over-charge protection B.Deep-discharge protection C.Over Current protection D.Short Circuit protection E.Over voltage protection
9	Tempartature	-40°C. to +60°C.
10	Life cycle	>2000 cycles at 80% OF INITIAL CAPACITY
11	compliances standard	IEC62133::2012,BIS
12	Control	Maximum power point tracking (MPPT)based charge controller with integrated LED driver
13	Dusk to down Operation	Provided
14	Motion Senser	PIR Senser
15	Motion Senser Range	>9M
16	Light Mounting Height	6M above ground
17	Humidity Range	0 to 95%(noncondensing)
18	Warranty	5 years

19	<b>Mounting Structure &amp; Accessories</b>	<b>Pole:-</b> 5/6 meter galvanized iron ingound or padestal mount pole as required for the system. 7/9 meter octagonal pole for Mini-Mast system. <b>Battery Box:-</b> Battery Box made of MS CRCA sheet duly powder coated. <b>PV Frame:-</b> PV Panel frame made of MS angel duly powder coated/painted. <b>Nuts/Bolts &amp; Accessories:-</b> Zinc plated nuts & bolts along with foundation bolts as requird, luminaire mounting arms, battery box stand and other accessories as required. <b>Wires:-</b> Suitable wires for internal connection of battery panel luminaire.
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#### SOLAR PANEL

SI.NO	Technical Specification:	60 Watt
1	<b>Solar Cell</b>	Premium grade Mono/Poly Crystalline Sillicon Type
2	<b>Solar Module Power</b>	>200W
3	<b>Compliances Standard</b>	IEC61215,ICE 61701,IEC61730
4	<b>Life Cycle</b>	>20years
5	<b>Battery Back up</b>	Minimum 12 hours.

### Technical Specification: 80W Solar Street Light

Supply, fitting, fixing of 80 watt LED Solar Standalone /Semi Integrated Street Lighting system. The Luminaire have MPPT charge controller and IP 66 Standards Protection. The solar lighting system should be having 150 Wp PV module, 3.2V/160Ah LiFePO4 (Lithium Ferro Phosphate) battery pack, 6 mtr long M. S galvanized Tubular pole (Hot dip galvanized). The solar lighting system manufacture must be registered in MNRE as a channel partner having SP 1 A gradation.

#### LED Luminaries with Fittings

SI.NO	Technical Specification:	80 Watt
1	Luminaire Wattage	80w
2	Led Make	OSRAM/CREE/PHILIPS/NISIA
3	LED viewing angle	120°
4	Color Temperature	6000K-6500K
5	Luminous Efficiency	>100 Lumen/watt
6	Lumen Output	>8000 Lumen
7	Life Span	>50000hours
8	Driver	In Built DC-DC type
9	Body	Alluminum Extruded / PDC Body
10	Protection	IP66 Standards
11	Compliances Standard	LM79,LM80

#### Energy Storage system and controller

SI.NO	Technical Specification:	80 Watt
1	Battery(LiFePO4) Rechargeble	12.8V/3.2V/160AH/BIS standard
2	Efficiency	>93%
3	Battery Pack Safety	in built with PCM model
4	Solar Charge Controller Capacity	5V,40 A
5	Low-Voltage indication	YES
6	Charging indication	YES
7	Charge Controller	IGBT Technology
8	Other Protections	A.Over-charge protection B.Deep-discharge protection C.Over Current protection D.Short Circuit protection E.Over voltage protection
	Tempartature	-40°C. to +70°C.
10	Life cycle	>5000 cycles at 80% DoD
11	compliances standard	IEC62133::2012,BIS
12	Control	Light control based charge with with integrated LED board
13	Motion Senser Range	No
14	Light Mounting Height	6M above ground
15	Humidity Range	0 to 95%(noncondensing)
16	Warranty	5 years

17	<b>Mounting Structure &amp; Accessories</b>	<p><b>Pole:-</b> 5/6 meter galvanized iron ingound or padestal mount pole as required for the system. 7/9 meter octagonal pole for Mini-Mast system.</p> <p><b>Battery Box:-</b> Battery Box made of MS CRCA sheet dully powder coated.</p> <p><b>PV Frame:-</b> PV Panel frame made of MS angel dully powder coated/painted.</p> <p><b>Nuts/Bolts &amp; Accessories:-</b> Zinc plated nuts &amp; bolts along with foundation bolts as requird, luminaire mounting arms, battery box stand and other accessories as required.</p> <p><b>Wires:-</b> Suitable wires for internal connection of battery panel luminaire.</p>
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#### SOLAR PANEL

SI.NO	Technical Specification:	80 Watt
1	<b>Solar Cell</b>	Premium grade Mono/Poly Crystalline Sillicon Type
2	<b>Solar Module Power</b>	150W to 200W
3	<b>Compliances Standard</b>	IEC61215,ICE 61701,IEC61730
4	<b>Life Cycle</b>	>25years
5	<b>Battery Back up</b>	Minimum 12 hours.

## **CHECK LIST FOR SUBMISSION OF DOCUMENTS**

### **Documents to be enclosed:**

1. Copy of valid Electrical & MV License, if applicable.
2. Copy of audited balance sheet and profit/ loss account for the last three years clearly indicating the turnover of the Agency.
3. Certificate from Authorized Agent / copy of work order as proof of experience in LED based Solar Street Light System during last three years.
4. Test certificate of SPV module from appropriate authority, if applicable.
5. Xerox copy of Income Tax/ PAN CARD of the firm with last 3 years IT Return.
6. Original Demand draft toward cost of tender paper.
7. Original Demand draft towards EMD.
8. List of Local office and service centre available within Ganjam District.
9. Willingness to open local office with proposed location in Ganjam before commencement of work, if not available.
10. Willingness to open cluster level service centre and inventory point at suitable places with proposed location within Ganjam District.
11. Undertaking to unconditional acceptance of all terms and conditions of the bid document.
12. Power of attorney to sign the agreement on behalf of bidders and partnership deed articles, if any.
13. Technical Bid.
14. Financial Bid.
15. Organization profile.
16. Registration Certificate of the Firm / Individual / Joint Venture, if applicable.
17. Declaration by the bidder rupees Rs. 100/- non-judicial stamp as per given format.
18. Technical specification of the produced offered.
19. Authorization letter of OEM to participate in the EoI.
20. Certificate of LED based Solar Street Light System.
21. Make of the Solar LED light NABL or IECQ laboratory.
22. Test certificate of Solar Street Light (SSL) by MNRE or its authorized centre as per MNRE Specification, which must be valid during the execution year of this work.
23. Other documents, if any, as the bidder wants to enclose.
- 24. For submission of document the test certificates of BIS of Battery cells and IEC certificates of various modules and Lm 80 may be considered.**

## **SCOPE OF WORK**

1. The board scope of the work would be designing, supply, installation, commissioning and maintenance for a period of 5 years from the date of handing over the specified solar street light system. The work will be executed at identified villages of Ganjam District.
2. If the agency is approved by the competent Authority, the specified work shall be entrusted by GP/Block and accordingly the payment will be released by the concerned GP/Block after fulfilling all criteria and conditions.
3. The firm or supplier shall have to execute the work as per technical specification, terms and conditions specified in the tender document/work order and approved price.
4. The bidders are advised to make an assessment and collect all necessary information regarding type of approach to the village, distance and mode of transportation to the execution site.
5. The firm or supplier shall maintain adequate inventory and safe storage of the equipments before erection of Street light.
6. Requisite height cement pedestal shall be constructed by the firm or supplier at the base before erection of solar light system. In order to prevent the rusting and the required coat of paint should be made.
7. The concerned GP or Block will provide the list location along with work order and point of installation of the solar street light.
8. A team of officials/Committee authorized by the Collector, Ganjam shall inspect and furnish satisfactory functioning of the street light after its installation, based on which the payment shall be released to the supplier. The 90% payment of agreement value or cost of the equipment or work order will be released on satisfactory functioning and 10% will be released periodically only during the warranty period of 5 years. The format for satisfactory functioning of Solar street light report is enclosed at Annexure-VI.
9. Warranty certificate to be furnished along with the commissioning report to the GP/Block level authorities.
10. The bidder shall take all responsibility to supply, install and commissioning of the LED street light system within the schedule time mentioned in the work order/agreement. If the contractor fails to adhere to the schedule, it will be liable for penalty. The penalty will be levied equivalent to 1% of delivery price of the delayed good or unperformed services for each week of delay up to a maximum deduction of 10% of the contract price. On exceeding the maximum limit of delay, the authority reserves the right to terminate the contract and forfeit the security deposit without prejudice.
11. No price escalation due to any reason shall be considered by the authority during the validity period of the contract agreement.
12. Comprehensive maintenance contract CMC of the complete system of the 5 year warranty period on entire Solar street light structure shall be executed between the concerned official of the GP/PS & the firm or supplier.

13. For uninterrupted delivery and sustainable maintenance service adequate number of service center shall be available/setup at cluster level/district level. The complain lodge by the BDO/GP concerned shall be addressed within 48 hours.
14. The bidder should come with one setup sample light system setup as per technical specification with due test performance certificate from any Govt. Laboratory, if required a set of sample light may be kept at DRDA for future reference.
15. The firm shall after completion and commissioning of the systems to submit all details of the installed system like system details installation reports in a prescribed format. Photography evidence on proof of delivery is essential and to be submitted at the time to claim.
16. A certificate to be obtained from South Co./Technical Committee/Competent authority as fixed by the Authority by the firm/supplier as a part of satisfactory performance report.
17. Permission of south co. for installation of solar Light in new pole or existing pole shall be obtained by the tenderer on his own responsibility as per the prevailing norms - **Whenever it is necessary.**
18. The date of commissioning including the year should be clearly mentioned / engraved/mark in the fitted solar light electrification pole for future reference.

**Collector-cum-CEO**  
**Zilla Parishad, Ganjam**

## FINANCIAL BID

Sl. No	Description of Item	Unit	Integrated/ All-In-One type		Semi Integrated/ Two-In-One type		Standalone/ split type	
			Rate in figure	Rate in words	Rate in figure	Rate in words	Rate in figure	Rate in words
<b>5</b>	Supply of Solar LED based lighting system with approved branded Company having requisite certification/MNRI approved of Integrated (all-in-one) / Semi Integrated (Two-In-One) / Standalone (Split type) Solar Street lighting System as per technical specifications. a. 20 Watt. <b>(With pole)</b> b. 20 Watt. <b>(Without pole)</b> c. 24 Watt. <b>(With pole)</b> d. 24 Watt. <b>(Without pole)</b> e. 30 Watt. <b>(With pole)</b> f. 30 Watt. <b>(Without pole)</b> g. 40 Watt. <b>(With pole)</b> h. 40 Watt. <b>(Without pole)</b> i. 45 Watt. <b>(With pole)</b> j. 45 Watt. <b>(Without pole)</b> k. 50 Watt. <b>(With pole)</b> l. 50 Watt. <b>(Without pole)</b> m. 60 Watt. <b>(With pole)</b> n. 60 Watt. <b>(Without pole)</b> o. 80 Watt. <b>(With pole)</b> p. 80 Watt. <b>(Without pole)</b>	1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set 1-Set						

**Note :**

- The price should be quoted per unit only inclusive of all incidental Cost & Taxes, Transportation Cost, Labour cost, Warranty, Office setup etc.
- GST should be quoted separately as application.

**Name & Address of the Firm :****Signature of the bidder with seal**